Directional Postural Control Assessment and Strategic Weighing to Control Balance

**Overview**

Postural control and directional balance loss are evident in older adults and those with orthopedic and neurological disabilities. This intermediate Balance-Based Torso-Weighting course identifies three-dimensional balance loss though specific testing of static, anticipatory and reactive control. Interventions to address the three-dimension loss via strategic weighting protocols applied to the torso via orthotics immediately stabilize the torso and improve postural control often improving the client’s ability to move.

This class provides both Webinars and In-Person Labs to integrate information. The Webinars provide the background, evidence, assessment, and strategic weighting protocols prior to hand-on training and follow-up cases afterward. The hands-on training integrates the assessment and technology with patient volunteers to ensure the clinicians understand and implement the procedures with best practice. Case reviews of each volunteer throughout the day enable clinicians to reflect and understand the implications of the technology across patient populations and levels of disability.

**Objectives:**

**By the end of the Pre-Webinars attendees will be able to:**
- Recite three evidenced based research studies of Balance-Based Torso-Weighting (BBTW).
- Describe two ways to improve the chances of adaptive neuroplasticity.
- Recite anatomical muscles of the trunk and actions with 75% accuracy.
- Identify the magnitude, velocity and directional loss of balance from videos with 80% accuracy.
- Document and determine the balance loss score on the assessment form with 90% accuracy.

**By the end the lab the attendees will be able to:**
- Apply perturbation to the torso with accurate hand placement and speed with 80% accuracy.
- Apply strategic weights on the torso per protocols to improve reactive control of balance in volunteers with 80% accuracy.
- Analyze differences in qualitative versus quantitative movement of pre and post balance and gait measures to determine benefit of strategic weighting 100% of the time.
- Independently justify the orthotic type to use with BBTW with 75% accuracy.
- Demonstrate assessment and first two strategic weight placements on instructor with 80% accuracy.

**Location** (For Hands On Sessions):
SWAN Rehab
1190 E Missouri Ave #100
Phoenix, AZ 85014

**Continuing Education Pending:**
CEU FL PT/PTA 20, NY 19.5, CT CEU
OT must apply with their state.

**Target Audience** - PT, PT Student,
OT, PTA, OTA, CPO, ATC, DC
PT, (PT-Student) PTA, OT, OTA, CPO
This course is designed to present and review the basics of assessment, evaluation and treatment for patients who present with balance problems. All participants would use the materials according to State/jurisdictional regulations.
- The PT, (PT -student second year) and OT will benefit from all aspects of the course from initial evaluation through the development of an inter-professional Plan of Care (POC) as well as the introduction and practice of Evidence Based treatment techniques.
- The PTA and COTA will benefit from the understanding of the components and theory behind the evaluation process, and experience in testing techniques as well as treatment methods which would be determined in the process for applying orthotics for patients.

**Instructional Ratio**
16:1 Max enrollment 16/Instructor

Participants will practice with the BalanceWear assessment device
- > 5 - 1/2 pound weights
- > 6 - 1/4 pound weights
- > 4 - 1/8 pound weights
- > 2 - 1/16 pound weights

**BalanceWear Assessment Device**: $475

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Motion Therapeutics, Inc. products and services are protected, in whole or in part, by U.S. and/or foreign patents. The following is a partial list of patents that Motion Therapeutics, Inc. either owns or licenses for its products: U.S. Patent No. 7,156,792; U.S. Patent No. 7,708,673, B2. In addition, other U.S. and foreign patents are pending for the Company’s products, technologies and services.
Seminar Outline

Directional Postural Control Assessment and Strategic Weighting to Control Balance

Pre-Webinar - 3 webinars a total of 3 hours
- Introduction to Balance-Based Torso-Weighting: BBTW
- Review The Evidence
- Translate Research to Clinical Applications
- Identify and Document Static and Reactive Loss of Balance
- Learn Beginning Weighting Strategies

Watching the Webinar is mandatory. 70% accuracy on written test post webinar required. - 15 min

Hands On Lab With Patients
Day 1 - April 18 - 8:00 AM - 5:30 PM
08:00 – 08:30  Registration
08:30 – 10:00  Lab-Directional Balance Assessment
10:00 – 10:15  Break
10:15 – 11:30  Lab-Targeting Sensory Input for Directional Balance Control
11:30 – 12:00  Lab Practice Sensory Versus Rigid LSO
12:00 – 12:45  Lunch Break
12:45 – 01:15  Sitting Perturbation and Strategic Weighting
01:15 – 02:30  Instruction Demonstration with Volunteer Patient
02:30 – 03:00  Measurement and Fitment of orthosis
03:00 – 03:15  Break
03:15 – 04:45  Volunteer Patient Lab
04:45 – 05:30  Case Presentations

Day 2 - April 19 - 8:30 AM - 5:30 PM
08:30 – 09:00  Review and Questions from Day 1
09:00 – 10:30  Volunteer Patient Lab
10:30 – 10:45  Break
10:45 – 12:00  Volunteer patient lab
12:00 – 12:30  Case Presentations
12:30 – 01:15  Lunch Break
01:15 – 02:30  Volunteer Patient Lab
02:30 – 02:45  Break
02:45 – 04:00  Volunteer Patient Lab
04:00 – 04:30  Case Presentations
04:30 – 05:30  Demonstrate Technique on Instructor

Post Webinar Required- Live & Recorded
1 Hour Personal Reflection on BBTW and Use in Clinical Practice

REGISTRATION FORM
BBTW Seminar: $475

Name: ____________________________
Profession: □ PT □ PTA □ OT □ OTA □ ATC
□ Other: ____________________________
Clinical Focus: ____________________________
Phone Number: ____________________________
Name of Institution, Company or Facility: ____________________________
Address: ____________________________
City: __________________ State: _______ Zip: __________________
E-mail Address: ____________________________

Send registration to:
Motion Therapeutics, Inc. 888.330.2289 Voice
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Oakland, CA 94661 cindy@motiontherapeutics.com

Register On-line at www.motiontherapeutics.com

Refund & Cancellation Policy: Motion Therapeutics, Inc. reserves the right to cancel or reschedule this seminar on one (1) week’s advanced notice due to an insufficient number of registrants or other unforeseen circumstances. Under these circumstances, seminar fees will be returned in full to the registrant. Please note that Motion Therapeutics, Inc. is not responsible for any participant expenses other than a refund of the seminar fee. All participant cancellations must be received in writing 10 days before the first day of the seminar for full refund. For cancellations received 10 days or less before the seminar day, the seminar fee will be returned less a $100 administrative fee.

Cynthia Gibson-Horn, PT
is a graduate of University of Wisconsin, developed BBTW in her clinical practice. She collaborated with several researchers to complete studies in Multiple Sclerosis, Parkinson’s Disease, elderly, and ataxia. She has presented her work at several International, National, and Local meetings. She designed and patented strategic weighting products. Cindy is the owner of Motion Therapeutics who produces the BalanceWear product line.